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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/581,346	06/02/2006	Christian Funke	2400.0420000/VLC/L-Z	5037	
	1 7590 12/10/2009 ERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.			EXAMINER	
1100 NEW YORK AVENUE, N.W.			BLAKELY III, NELSON CLARENCE		
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER	
			1614		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/581,346	FUNKE ET AL.					
Office Action Summary	Examiner	Art Unit					
	NELSON C. BLAKELY III	1614					
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was prepared to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>04 So</u>	eptember 2007						
	action is non-final.						
· -							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	•						
4)⊠ Claim(s) <u>6-10</u> is/are pending in the application.							
4a) Of the above claim(s) <u>9 and 10</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>6-8</u> is/are rejected.							
7) Claim(s) is/are objected to.	· · · · · · · · · · · · · · · · · · ·						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
··· _	r						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex		• •					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f)					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1.☐ Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P						
Paper No(s)/Mail Date <u>09/04/2009</u> .	6) Other:	- т г ··					

DETAILED ACTION

Application Status

Claims 6-10 of the instant application are pending.

Applicant's Arguments, filed 09/04/2009, have been fully considered.

Rejections/objections not reiterated from previous Office Actions are hereby

withdrawn. The following rejections/objections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/04/2009 has been entered.

Election/Restrictions

Applicant's election <u>without traverse</u> of a composition comprising a synergistically effective combination of compounds of the Formula (I), and at least one insecticidally active compound of groups 2 and 3, in the reply filed on 11/26/2008, is acknowledged.

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(a) A compound of formula (I), represented by the compound I-1-4, and having the following structure:

- (b) An insecticidally active compound of group 2, chlorpyrifos; and
- (c) An insecticidally active compound of group 3, methiocarb.

Newly submitted claims 9 and 10 are directed to an invention that is independent or distinct from the invention originally claimed. Thiodicarb was not an elected at least one insecticidally active compound of groups 2 and 3 in the aforementioned response. Additionally, there would be a special technical feature different from what was originally examined, and such a combination, e.g., a compound of formula (I), chlorpyrifos, methiocarb and thiodicarb, with regard to synergism, efficacy and even the processes of preparing and controlling animal pests would also differ.

Since Applicant has received an Action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9 and 10 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Therefore, instant claims 6-8, drawn to a process for preparing a pesticide composition, and a method for controlling animal pests, comprising contacting the composition as defined in claim 8 with extenders and/or surfactants, and with a pest and/or its habitat, respectively, are presented for examination on their merits.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

The Information Disclosure Statement, filed 09/04/2009, is acknowledged and considered to the extent each reference is a proper citation on a US patent.

Applicant's Amendments

Applicant's Preliminary Amendment, filed 06/02/2006, wherein claims 1-4, 6 and 7 are amended, and claim 5 is canceled, is acknowledged.

Applicant's Amendment, filed 11/26/2008, wherein claims 1 and 2 are amended, and claim 5 is canceled, is acknowledged. Applicant's Amendment, filed 09/04/2009, wherein claims 6 and 7 are amended, claims 1-5 are canceled, and claims 8-10 are added, is acknowledged.

Response to Amendment

The declaration under 37 CFR 1.132, filed 09/04/2009, is insufficient to overcome the rejection of claims 1-4, 6 and 7 (now instant claims 6-8 pursuant to Applicant's Amendment, filed 09/04/2009), previously rejected under 35. U.S.C. 103(a) based upon Lahm *et al.* (International Application Serial No. WO 03/015519 A1; Cited by Applicant), and in view of Brück *et al.* (U.S. Patent No. 6,576,661B1), as evidenced by EXTOXNET (Extension Toxicology Network, Toxicology Information Briefs; *Cholinesterase Inhibition*), September, 1993 [online], [retrieved on 2008-05-22]. From the Internet <URL: http://extoxnet.orst.edu/tibs/cholines.htm> and Merriam-Webster's Medical Dictionary© [online], Merriam-Webster, Inc., 2002 [retrieved on 2008-05-22]. From the Internet: <URL: http://dictionary.reference.com/browse/extender>, as set forth in the last Office Action.

It is acknowledged wherein the declaration, substantiated by Dr. Wolfram Andersch, provides the results of Examples A-C in Tables A1, A2, B1, C1 and C2. Accordingly, in Tables A2 and C2, synergism is allegedly seen in the test comprising I-1-4 + chlorpyrifos (1:5), line 17 and line 15, respectively.

The declaration is deficient, however, in that Dr. Andersch has not provided data commensurate in scope to the instantly claimed invention, e.g., the compound (I-1-4) of formula (I), chlorpyrifos and methiocarb. Confusingly, the Examiner cannot independently analyze the data, as a whole, without these pertinent results.

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The declaration refers only to the system described *supra* and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

Applicant's Arguments, with respect to claims 6-8, have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm *et al.* (International Application Serial No. WO 03/015519 A1; cited by Applicant), in view of Elbe *et al.* (U.S. Patent No. 6,054,473), as evidenced by Brück *et al.* (U.S. Patent No. 6,576,661B1; cited in a previous Office Action).

With regard to instant claims 6-8, Lahm *et al.* disclose, in reference claims 1-8, pages 74 and 75, the instantly claimed compound of formula (I-1), a

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pyrazole carboxamide. See infra.

1. A compound selected from Formula 1 or an N-oxide thereof

wherein

R¹ is CH₃. F, Cl or Br; R² is F, Cl Br, I or CF₃; R³ is CF₃, Cl, Br or OCH₂CF₃; R^{4a} is C₁-C₄ alkyl; R^{4b} is H or CH₃; and R⁵ is Cl or Br;

or an agriculturally suitable salt thereof.

See also reference claim 8, lines 20 and 21 of the claim, and page 4, line 30, through page 5, line29 (preferably page 5, lines 13 and 14), wherein Lahm *et al.* disclose the instantly claimed compound (specifically preferred), wherein R¹ is CH₃, R² is CI, R³ is Br, R^{4a} is CH₃, R^{4b} is H and R⁵ is CI. In the instant excerpt, specifically page 5, lines 27-29, Lahm *et al.* disclose wherein the preferred compositions of the reference invention are those which comprise the above

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preferred compounds, and wherein the preferred methods of use are those involving the preferred compounds. Additionally, Lahm *et al.* disclose, in reference claims 9-12, a composition for controlling an invertebrate pest comprising a biologically effective amount of a compound of claim 1, and at least one additional component, e.g., surfactants, solid diluents and liquid diluents (or extenders), wherein the composition may also comprise an effective amount of at least one additional biologically active compound or agent, e.g., chlorpyrifos. In reference claims 14 and 15, Lahm *et al.* disclose a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of reference claims 1 and 10, e.g., the instantly claimed compound of formula (I-1) and chlorpyrifos. See instant claim 7. On page 5, line 36, through page 6, line 9, for example, Lahm *et al.* disclose a method of preparing the reference compounds of Formula 1. See instant claim 6.

Lahm *et al.* fail to disclose specifically wherein the instantly claimed composition consists essentially of a synergistically effective combination of a compound of the formula (I-1) and at least one insecticidally active compound of groups 2 and 3, e.g., chlorpyrifos and methiocarb. However, Elbe *et al.* disclose, in reference claims 1-3, a microbicidal composition comprising a microbicidally effective amount of a compound, e.g., a pyrazole carboxamide, and an inert diluent (or extender), and a method of controlling undesired microorganisms in plant protection and in the preservation of materials, which method comprises applying to such undesired microorganisms or to their habitat a microbicidally

effective amount of the compound of reference claim 1, a pyrazole carboxamide. In column 1, lines 15-22, Elbe *et al.* disclose that it is known that numerous pyrazole carboxamides have good fungicidal properties. In column 9, lines 18-26, Elbe *et al.* disclose that active compounds according to the reference invention may be used as such, or in their formulations, also mixed with known fungicides or insecticides, e.g., chlorpyrifos (column 12, line 23) and methiocarb (column 12, line 46), to widen the spectrum of action or to prevent development of resistance. In the instant excerpt, Elbe *et al.* further disclose where in many cases, synergistic effects are achieved.

Though Elbe *et al.* disclose wherein insecticides such as chlorpyrifos and methiocarb have been used in a synergistic combination with a pyrazole carboxamide in the prior art, Elbe *et al.* and Lahm *et al.* fail to disclose specifically wherein the mixing ratio of the compound of the formula (I-1) to chlorpyrifos and/or methiocarb is from 50:1 to 1:50 (instant claim 8). However, for evidentiary purposes, Brück *et al.* disclose, in reference claims 1 and 2, a method of controlling at least one animal pest comprising applying an insecticidally and/or acaricidally effective amount of the composition of reference claim 1 to the animal pest and/or its environment. It is acknowledged wherein Brück *et al.* fails to disclose the instantly claimed compound (I-1); however, Brück *et al.* is provided to disclose preferred mixing ratios of chlorpyrifos and methiocarb in the prior art. In column 22, line 60, through column 24, line 18, Brück *et al.* disclose a table comprising the preferred and especially preferred mixing ratios of chlorpyrifos and methiocarb, both being 10:1 to 1:10 and 5:1 to

1:5, respectively. In column 3, A-2 (lines 1-30), Brück *et al.* disclose chlorpyrifos as a preferred (thio)phosphate, and in column 14, C-54 (lines 1-10), methiocarb as a preferred carbamate. See also column 13, line 19. Additionally, Brück *et al.* disclose, in column 22, lines 11-16, that the insecticidal and acaricidal action of the active compound combination according to the reference invention exceeds the total of the actions of the individual active compounds; and a true synergistic effect, which could have not been predicted exists, not just a complementation of action. Further, Brück *et al.* disclose, in column 22, lines 42-47, that if the active compounds are present in the active compound combinations according to the reference invention, the synergistic effect is particularly pronounced.

Therefore, a skilled artisan would have envisaged the instantly claimed combination composition, comprising the instant compound of formula (I-1) and chlorpyrifos, as disclosed by Lahm et al., in combination with methiocarb, as disclosed by Elbe et al., wherein the chlorpyrifos and methiocarb are present in preferred weight ratios, as evidenced by Brück et al. One of ordinary skill in the art would have been motivated to combine the teachings of the aforementioned references when seeking a combination composition for controlling an invertebrate pest, wherein the insecticidal and acaricidal action of said combination considerably exceeds the total of the actions of the individual active compounds. It would have been obvious to one of ordinary skill in the art, at the time of the invention, because the combined teachings of the prior art are fairly suggestive of the claimed invention.

Accordingly, the instant invention, as claimed in claims 6-8, is *prima facie* obvious over the combination of the aforementioned teachings.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 7 and 8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 7, 9 and 12 of copending Application No. 11/630,312 (hereinafter referred as Application No. '312), as evidenced by Brown (*Cholinesterase Testing*, University of Maryland [Retrieved online on 2009-11-12]. Retrieved from the Internet: <URL: http://www.entmclasses.umd.edu/peap/leaflets/pil7.pdf).

Although the conflicting claims are not identical, they are not patentably distinct from each other. Application No. '312 is drawn a mixture comprising (a) a compound of Formula I, e.g., 3-bromo-*N*-[4-chloro-2-methyl-6[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1*H*-pyrazole-5-carboxamide, or

$$\begin{array}{c|c} CH_3 & H & \\ \hline \\ CI & \\ \hline \\ H_3C & H \\ \end{array}$$
 , and a

component (b), wherein the component (b) is at least one invertebrate pest control agent, e.g., cholinesterase inhibitors. See reference claims 1 and 3. In reference claims 7 and 9, Application No. '312 is drawn to a composition for controlling an invertebrate pest comprising a biologically effect amount of the mixture of claim 1, for example, and at least one additional component, e.g., a surfactant, and wherein the weight ration of the component (b) to the compound of Formula I is from 150:1 to 1:25. In reference claim 12, Application No. '312 is drawn to a method for controlling an invertebrate pest comprising contact the

invertebrate pest or its environment with a biologically effective amount of the mixture of claim 1, for example.

Application No. '312 fails to disclose specifically in the claims wherein the cholinesterase inhibitors are chlorpyrifos and methiocarb (instant claims 7 and 8). However, Brown discloses, in the first paragraph of column 1, on the first page of the document, two classes of insecticides, the organophosphates, e.g., chlorpyrifos, and the carbamates, e.g., methiocarb, that act as cholinesterase inhibitors. See also page 3 of the document. It is acknowledged Brown is provided merely for evidentiary support to illustrate that the claimed cholinesterase inhibitors of Application No. '312 reasonably encompass chlorpyrifos and methiocarb, as instantly claimed.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Claims 7 and 8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 8, 10 and 12 of copending Application No. 11/628,145 (hereinafter referred as Application No. '145), as evidenced by Brown (*Cholinesterase Testing*, University of Maryland [Retrieved online on 2009-11-12]. Retrieved from the Internet: <URL: http://www.entmclasses.umd.edu/peap/leaflets/pil7.pdf).

Although the conflicting claims are not identical, they are not patentably distinct from each other. Application No. '145 is drawn a mixture comprising (a) a compound of Formula I, e.g., 3-bromo-*N*-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1*H*-pyrazole-5-

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carboxamide, or

one invertebrate pest control agent, e.g., cholinesterase inhibitors such as chlorpyrifos. See reference claims 1, 5 and 6. In reference claims 8 and 10, Application No. '145 is drawn to a composition for controlling an invertebrate pest comprising a biologically effect amount of the mixture of claim 1, for example, and at least one additional component, e.g., a surfactant, and wherein the weight ration of the component (b) to the compound of Formula I is from 100:1 to 1:120. In reference claim 12, Application No. '145 is drawn to a method for controlling an invertebrate pest comprising contact the invertebrate pest or its environment with a biologically effective amount of the mixture of claim 1, for example.

Application No. '145 fails to disclose specifically in the claims wherein the cholinesterase inhibitors additionally comprises methiocarb (instant claims 7 and 8). However, Brown discloses, in the first paragraph of column 1, on the first page of the document, two classes of insecticides, the organophosphates, e.g.,

chlorpyrifos, and the carbamates, e.g., methiocarb, that act as cholinesterase inhibitors. See also page 3 of the document. It is acknowledged Brown is provided merely for evidentiary support to illustrate that the claimed cholinesterase inhibitors of Application No. '312 reasonably encompass not only chlorpyrifos, but also methiocarb, as instantly claimed.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NELSON C. BLAKELY III whose telephone number is (571) 270-3290. The examiner can normally be reached on Mon - Thurs, 7:00 am - 5:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. C. B. III/ Examiner, Art Unit 1614

/Ardin Marschel/ Supervisory Patent Examiner, Art Unit 1614